

TABLE 3.—Maximum free-air wind velocities (m. p. s.), for different sections of the United States based on pilot-balloon observations during June 1941

Section	Surface to 2,500 meters (m. s. l.)					Between 2,500 and 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m. s. l.)	Date	Station	Maximum velocity	Direction	Altitude (m. s. l.)	Date	Station	Maximum velocity	Direction	Altitude (m. s. l.)	Date	Station
Northeast ¹	38.9	NW	2,500	9	Boston, Mass.	43.9	NW	2,620	9	Boston, Mass.	61.2	W	12,360	23	Portland, Maine.
East-Central ²	31.4	N	660	5	Richmond, Va.	32.4	WSW	4,170	13	Knoxville, Tenn.	48.0	NW	11,080	5	Nashville, Tenn.
Southeast ³	24.1	W	2,470	15	Atlanta, Ga.	25.4	W	3,600	4	Charleston, S. C.	44.0	WNW	13,970	5	Atlanta, Ga.
North-Central ⁴	34.5	S	1,780	24	Rapid City, S. Dak.	55.8	SW	4,840	26	Rapid City, S. Dak.	50.0	W	12,710	30	S. Ste. Marie, Mich.
Central ⁵	31.4	S	1,830	6	Des Moines, Iowa	31.8	SSW	3,210	8	Dodge City, Kans.	64.0	SW	16,000	30	Wichita, Kans.
South-Central ⁶	29.4	S	1,390	9	Oklahoma City, Okla.	34.0	SW	4,800	10	Abilene, Tex.	66.0	WSW	11,980	11	Abilene, Tex.
Northwest ⁷	34.2	NW	940	28	Ellensburg, Wash.	61.5	WSW	4,280	25	Havre, Mont.	53.0	S	8,390	23	Portland, Oreg.
West-Central ⁸	38.0	NW	1,620	10	Sheridan, Wyo.	56.6	SSW	3,560	26	Modena, Utah	75.5	NNW	10,930	7	Redding, Calif.
Southwest ⁹	34.6	NW	2,500	7	Sandberg, Calif.	39.6	SSW	4,620	9	Roswell, N. Mex.	85.0	W	21,560	17	Albuquerque, N. Mex.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.

² Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.

³ South Carolina, Georgia, Florida, and Alabama.

⁴ Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

⁵ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

⁶ Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except extreme west Texas), and western Tennessee.

⁷ Montana, Idaho, Washington, and Oregon.

⁸ Wyoming, Colorado, Utah, northern Nevada, and northern California.

⁹ Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

WEATHER ON THE NORTH ATLANTIC OCEAN

By H. C. HUNTER

Atmospheric pressure.—The pressure during June 1941 averaged below normal near the Azores and especially over waters adjacent to Newfoundland, the Maritime Provinces, and New England. Pressure above normal was the rule over the southwestern and the far eastern portions. For most areas of the ocean readings were higher during the second half of the month than during the first half.

The extremes of pressure noted in the vessel reports now available were 1,030.5 and 989.4 millibars (30.43 and 29.22 inches). The high reading was noted on the 25th, before sunrise, by the American Liner *Excalibur*, near 37½° N., 42° W., and the low by a vessel not far to eastward of Nova Scotia, during the forenoon of the 10th.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, June 1941

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Millibars	Millibars	Millibars		Millibars	
Lisbon, Portugal ¹	1,018.0	+1.1	1,024	5	1,010	9
Horta, Azores	1,022.9	-1.1	1,029	26	1,014	7
Belle Isle, Newfoundland	1,008.8	-1.4	1,019	2, 15	990	26
Halifax, Nova Scotia	1,012.7	-2.2	1,024	13	991	10
Nantucket	1,013.9	-1.3	1,024	13	1,000	5
Hatteras	1,016.3	0.0	1,025	7	1,001	5
Turks Island	1,018.7	+1.8	1,023	28	1,015	4
Key West	1,016.9	+1.3	1,021	7	1,014	5
New Orleans	1,015.9	+0.7	1,021	20	1,011	4

¹ For 26 days.

NOTE.—All data based on available observations, departures compiled from best available normals related to times of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Cyclones and gales.—The month seems to have been more stormy than June usually is over those portions of the North Atlantic which are well covered by the reports at hand. However, the latter half of the month was less disturbed than the earlier half.

The information indicates two instances in which the wind rose to force 11. The earlier occurred during the night of the 2d-3d, when the cutter *Tampa* noted the storm; its position was about 39° N., 48° W. The low, with which the force 11 was connected, had been located

over the ocean not far from Nantucket on the morning of the 2d, and increased considerably in strength as it traveled eastward during the next 24 hours; its later movement was toward the north-northeast till lost to observation on the 6th.

The later occurrence of force 11 was likewise noted by the *Tampa* but about 300 miles to westward of its location on the 2d-3d. The time was the forenoon of the 7th. The cyclone to which this intense wind was due had shown marked strength as it crossed the coast line near Atlantic City, N. J., during the night of the 4th-5th. It maintained its energy with no noteworthy change as it moved slightly to northward of due east; its speed was slower than that of the preceding center, but like that center it turned to northeastward when near the 60th meridian. It was lost to observation on the 9th.

Fog.—Quite marked contrasts are found in the work charts of occurrence of this month and May just preceding. However, the 2 months were alike, as far as reports show, in the complete absence of fog in areas near the coast from Hatteras southwestward to the Rio Grande.

Between Capes Hatteras and Cod a surprising increase appears in amount of fog noted. The 5° square, 35° to 40° N., 70° to 75° W., is remarkable for the gain in foggy days from 5 in May to 16 in June. This number of 16 is almost twice as great as indicated for this month for any other North Atlantic square; also it is much greater than the normal number for this square in June, though it is not unprecedented. In time distribution there were 4 of the first 5 days which had fog, then 8 days without fog, then 12 days with fog out of the final 17.

To southward of this square, between meridians 70° and 75°, as far as the central Bahamas, where May had furnished no fog reports, June has furnished reports for 5 days between latitudes 35° and 30°, and for 2 days between 30° and 25°.

To eastward and northeastward of Cape Cod, where there had been a moderate number of foggy days during May, hardly any reports have come of June fog, although the records of previous years show that this area is normally as foggy during June as any other part of the North Atlantic Ocean.

For the region between Bermuda and the western Azores, where May had brought several reports of fog, June furnished a very few scattered reports.